

CORRES CONTROL
INCOMING LTR NO

5364 RF 93

DUE
DATE

ACTION

DIST. LTR ENC

BENEDETTI, R L	
BENJAMIN, A	
BERMAN, H S	
CARNIVAL, G J	
COPP, R D	
CORDOVA, R C	
DAVIS, J G	
FERRERA, D W	
FRANZ, W A	
HANNI, B J	
HEALY, T J	
HEDAH, T G	
HILBIG, J G	
HUTCHINS, N M	XX
KIRBY, W A	
KUESTER, A W	
MAHAFFEY, J W	
MANN, H P	
MARX, G E	
McKENNA, F G	
MORGAN, R V	
PIZZUTO, V M	
POTTER, G L	
SANDLIN, N B	
SATTERWHITE, D G	
SCHUBERT, A L	
SETLOCK, G H	
SULLIVAN, M T	
SWANSON, E R	
WILKINSON, R B	
WILSON, J M	

Lee, E XX

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PATS/T130G

Reviewed for Addressee
Corres Control RFP

12-22-93
DATE BY

Ref Ltr #

DOE ORDER # 5400 1

RF-46522 (Rev 9/93)

STATE OF COLORADO



Dec 22 2 31 PM '93

FG&G
ROCKY FLATS PLANT
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Roy Romer
Governor

Patricia A. Nolan, MD, PhD
Executive Director

COLORADO DEPARTMENT OF HEALTH

Dedicated to protecting and improving the health and
environment of the people of Colorado

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December 10, 1993



000014493

Mr. Richard J. Schassburger
U. S. Department of Energy
Rocky Flats Office, Bldg 116
P.O. Box 928
Golden, Colorado 80402-0928

**RE: An Analysis of the Potential for Redirection of the Rocky Flats Environmental
Restoration Program, October 8, 1993**

Dear Mr. Schassburger,

The Colorado Department of Health, Hazardous Materials and Waste Management Division (the Division), has reviewed the above referenced document submitted by DOE and prime operating contractor, EG&G. Though not a required IAG submittal, we have taken the liberty of preparing comments because of the significance of the concepts included in the document.

As the attached comments explain, we generally endorse the redirected approach presented. Taking advantage of lessons learned in implementing the ER program to date can and should be done. However, we do not believe that most of the problems experienced can be blamed on the IAG. The agreement contains mechanisms that have been successfully used to adjust the program when needed. Programmatic problems have occurred because of short DOE budgets and an inability of DOE to meet their commitments. Revamping the ER program **must** be accompanied by resolution of the budget crisis and greater DOE commitment to performance of the agreement.

If you have any questions regarding these matters, please call Joe Schieffelin of my staff at 692-3356.

Sincerely,

Gary W. Baughman
Gary W. Baughman, Chief
Facilities Section
Hazardous Waste Control Program

cc Daniel S. Miller, AGO
Jackie Berardini, CDH-OE
~~Joe Schieffelin~~ EG&G
Martin Hestmark, EPA

ADMIN RECORD

Colorado Department of Health

Review and Comment

**An Analysis of the Potential for Redirection of the RF
Environmental Restoration Program (aka SPIRIT)**

General Comments:

1. The specific improvements to the ER program contained in this document are generally very good ideas. Many of these ideas are not new, but it is important to see them brought together into a single source and made a part of a programmatic improvement proposal. It is also encouraging to see a realization that ER and Waste Management are inherently linked and that cooperation is necessary. However, much of the supporting text in this document is superfluous, incorrect, incomplete, misleading, and/or inflammatory. For this reason, the Division recommends that DOE distill this document into specific proposals only.

2. There is an overall tone within this document that lays the blame for most of the ER problems at RFP on the IAG. The Division is concerned about this perception. The IAG set ambitious schedules for the ER program that were closely reviewed by several federal entities (DOE-HQ, DOJ, OMB). We are not aware that any of the reviewers believed the schedules, or the underlying assumptions, to be unrealistic. Regardless, EPA and CDH have repeatedly worked with DOE in extending schedules related to assumptions that have proven to be overly optimistic (procurement lead-time, laboratory turnaround, etc.). Therefore, it is our belief that the current problems with the ER program are not a result of the IAG, but rather a result of a lack of DOE funding, a failure by DOE to request adequate funding and infrastructural support, and redundant, irrelevant, costly, and unnecessary DOE requirements on the ER program.

3. The Division does not agree that the IAG is a "major limiting and constraining issue" for the current ER program. None of the six bulleted objectives listed for the revised ER approach in Section 2.4 is precluded by the current IAG. Furthermore, though much has been made of the schedules set in the IAG and how difficult they are to meet, only one milestone has, in fact, been missed. Over 30 milestones have been extended by EPA and CDH for

reasons associated with overly optimistic initial schedule assumptions.

It is true that many more, if not all, future milestones are in danger of default. However, this is due to the reasons stated in general comment 2, not the IAG (the only missed milestone is directly tied to a unilateral DOE budget allocation decision resulting from a short budget).

This is not to say that the Division feels no opportunities are available to improve the ER program or the IAG. We do. Implementation of any program of this size will result in some lessons learned and new ideas for improvement. However, "blame" should be cast where it belongs.

4. The Division does not agree that a final land use decision is a "major limiting and constraining issue" for the current ER program. Again, none of the six objectives for the revised ER approach in Section 2.4 is precluded by not having a land use plan or decision. In addition, the explanation in Section 4.2.2 demonstrates that Potential Early Actions (the only short term activities in this proposal) are not dependent on land use decisions. For the remainder of the proposed modifications to the ER program, current definition of land use is not necessary. The Division would participate in an unbiased future land use forum to support future ER program needs. We agree that this information may be useful in the future, but is not currently limiting the ER program and will not in the coming months. For this reason, we believe that land use planning is a task that the Citizens Advisory Board (CAB) should include in their activities.

Specific Comments:

Section 1.1: The first paragraph on page 2 states that "In order to come as close as possible to achieving the IAG commitments, RFP has taken the following actions: . . . (2) deferring intrusive characterization and planned cleanup for six OUs in the IA until transition and/or D&D activities are initiated, . . ." This statement is contradictory in that delaying work inherently causes IAG commitments to be missed. Nevertheless, the Division is aware that intrusive actions in the IA have been deferred. We have understood that this was strictly a budgetary decision that was a) necessary to keep OUs 1 through 7 moving forward (not enough dollars to fund everything; OUs 1 through 7 were given funding priority) and b) able to attain cost efficiency by combining similar characterization efforts across OUs. It is not correct to tie the deferral of intrusive work to transition and D&D. The decision on what intrusive work to defer and for how long has not yet been made.

The first paragraph on page 2 goes on to identify five issues that

are not resolved. The Division has several questions related to these issues: 1) Who is increasing the pressure to accelerate the lengthy cleanup process? 2) What caused the "unrealistic budget spike" in years beyond the Five-Year Plan window? 3) How are factors other than future land use being accounted for in "overly conservative required cleanup levels"?

In the third paragraph on page 2, the text states that the analysis presented in this document relied on recent regulatory innovations including Corrective Action Management Units (CAMUs). How was the analysis affected by considering CAMUs; why were CAMUs considered given that Colorado regulations do not currently allow for CAMUs, or any equivalent, at this time; and who did the CAMU analysis?

Section 1.2: This section introduces the idea of using IM/IRAs to accomplish early actions or presumptive actions on certain IHSSs. This is a good idea. However, more work needs to be done to 1) assure that only those actions that are needed are taken, 2) actions taken are the right action, and 3) when action is taken on limited information, contingency plans are developed and utilized in case the available information is wrong or incomplete.

The first paragraph on page 4 states that IM/IRAs could dramatically reduce the amount of contaminated waste requiring treatment. Please clarify why this is the case.

Section 1.3: Please explain why assumptions 1 and 2 are crucial to the revised ER approach. The vast majority of this document presents a revised ER approach that reorganizes IHSSs into a potentially more efficient framework for characterization and early action, if warranted. Remedy selection criteria are beyond the scope of this document and are properly not included. This would include cleanup standards, land use determinations, etc.

Assumption 3 is crucial to this revised ER approach and is an item which the Division strongly endorses. As you are aware, this is an issue the Division has taken every opportunity in every forum to stress. We will continue to do so. We encourage the ER staff to take ownership of this issue to the extent that action must begin immediately if we are to achieve any early actions. Immediate coordination with waste management and hazardous waste permitting must occur. The Division stands ready to assist this effort and has already made this issue a top priority.

Section 2.2: Concerning the statement "The overall result is an ER Program that meets Five-Year Plan budgets but extends schedules," DOE needs to change its management philosophy from budget driven non-compliance to goal setting and accomplishment of tangible objectives.

Processes for accomplishing work at RFP should have become less complex through time. In fact, some areas of work implementation

have been simplified or streamlined. However, Defense Programs requirements that are costly and of questionable "value-added" are still being applied even though they are not applicable to ER work. These requirements are not new to RFP, but their application to ER is potentially misguided. Efforts to evaluate these requirements and their validity to ER work is definitely necessary and is more important to improving the ER program than many of the concepts espoused in this document.

The first paragraph on page 9 states that RFP has made a recommendation on how the PACs and PICS identified in the Historical Release Report would be handled. To date, the Division has not received this recommendation.

Section 2.3.4: The last three bullets listed as items addressed by the QAT are incorrect and should be deleted.

Section 2.3.6: DOE should recognize that land-use decisions made in forums other than those related to the IAG may not be applicable or useful for IAG-related decisions.

Section 3.1: The Division suggests that the second paragraph in this section be changed to read "The decision to transition from weapons production to other beneficial uses could have (rather than "has had") an impact on the timing and priorities of planned remedial actions."

The third paragraph contains some incomplete information. While it is true that section I.B.10 of the IAG does not include specific limitations on document review schedules for IM/IRAs by EPA and CDH, it also does not include limitations for document preparation timeframes by DOE. In fact, the latter has proven to be of far greater magnitude than the former. Nevertheless, all parties should be aware that the IAG milestones are built on the detailed schedules of August 14, 1990. These detailed schedules do provide limitations on document review timeframes and the agencies have performed within them.

We agree that IM/IRAs at RFP take longer to implement than at other sites. We do not agree that this is only because of more rigorous and cumbersome design requirements. Even so, we question the value of these rigorous and cumbersome design requirements.

Contrary to the second paragraph on page 14, and consistent with general comments 2 and 3, the Division does not recognize that the IAG is outdated.

Section 3.2: We heartily endorse the major tenant of this section, that being that an increase in waste storage is a prerequisite for successful ER program implementation.

The first sentence of the third paragraph of this section is

incorrect. The Division has turned IDM enforcement over to its Monitoring and Enforcement Section from its Hazardous Waste Facilities Section. This has not affected the amount of IDM under management. Hopefully it has brought management of the IDM in to more timely compliance with RCRA requirements.

The latter part of the third paragraph is very interesting to the Division and the Colorado AGO. It seems that DOE has decided that compliance with NEPA is more important than compliance with RCRA and CHWA. NEPA has been determined by the 11th Circuit Court of Appeals to be the functional equivalent of the RCRA permitting process. Therefore, sacrificing RCRA and CHWA compliance to attain NEPA compliance is unacceptable to the Division.

Regarding the second paragraph on page 17, please explain how reconfiguring the OUs can accomplish reducing the waste storage capacity requirements. In addition, the Division would like to know the internal "drop-dead" date for when waste storage must be expanded regardless of the Envirocare facility availability.

Section 3.3: "The perception" that final remedial actions must meet ARARs associated with residential risk assessment scenarios is not correct. Sites where remedial action can attain acceptable levels of risk to hypothetical future residents will be considered clean and will not require ongoing future monitoring and care. Sites where acceptable residential risk can not be attained (or not fully attained) by remedial action will not be considered clean and will require ongoing monitoring and care. If the site is in the industrialized area, risk to workers will be evaluated. If the level of risk to workers is acceptable, even though residential risk is unacceptable, cleanup of the site may be deferred. Depending on the types and amounts of contamination, however, monitoring and stabilization of the site are usually necessary during this cleanup deferral period to assure that contamination does not continue to worsen or spread.

Section 3.4: A satisfactory effort to revamp the ER program at RFP must include an internal DOE commitment to re-evaluate the applicability of NEPA. That DOE "requires" application of NEPA in the face of the good judgement of every other regulatory entity is indicative of why the ER program has had problems.

Section 4.2.1: Please clarify what is meant by "not significantly above" and "action levels" in the first bullet. In addition, please clarify how the current data base for an IHSS is being judged to be sufficiently comprehensive to make a "no further action" decision.

Who determines the "reasonable land use possibilities" for an IHSS?

OU 3 can not be a "no further action." The fact that there are soils east of Indiana street and sediments in Great Western

Reservoir exceeding risk thresholds means that there will be an action taken. That action may be limited to deed restrictions, use limitations, or other institutional controls, but an action will be taken.

Section 4.2.2: Please see comments to Section 4.2.1 above.

What is the source of the "hotspot" definition included in Table 4.3?

Section 4.2.4: IHSSs that are in the IA and are only covered with pavement are not candidates for deferral to D&D. Consider OU 14 for example. DOE has listed 7 of the 8 OU 14 IHSSs as D&D deferrals; several of these are not in the PA, not under buildings, and are only covered by parking lots. This does not constitute grounds for D&D deferral.

Section 4.4: The Division does not agree with the concept of consolidating OUs 8, 9, 10, 12, 13, and 14 into one OU. OUs 9 and 10 consist of IHSSs that need to "close" under RCRA and CHWA regulations. Combining these IHSSs into a larger OU would be counterproductive (The Division recommends that this document be expanded to include a streamlining proposal for OUs 9 and 10 similar to how OUs 4, 7, and 11 are being handled). In addition, to be consistent with the objectives of the remainder of this document, the Division would recommend that the IA be reorganized into an NFA OU, a transition/D&D OU, a PEA OU, an LFI OU, an RFI/RI OU, and at least one Closure OU. This would avoid a phased or partial ROD for a larger OU and more economically attain the goals of this document.

With regard to a surface water/ground water OU, the Division does not believe that this will accomplish the intended purpose. A complete understanding of the ground water and surface water systems is not precluded by the present system. Furthermore, final remedies will be determined on a site-specific basis, considering all media. This is done to ensure consistent and comprehensive remedy selection. Neither the current system or the new system proposed in this document would preclude limiting IM/IRAs to source removals and isolation - there is no advantage to be gained by putting ground and surface water in a separate OU.

The Surface Water Management IM/IRA (aka the OU 6 IM/IRA) was scoped to include 1) a discontinuance of the ponds for spill control and 2) transition of the ponds into remediation. While the Division sees merit in ensuring that IA remediation, and the potential for releases during remediation, is handled responsibly, we do not see a need to tie all of the ponds with IA remediation timeframes. This would be counterproductive and inconsistent with the OU 6 IM/IRA.

Section 4.5.2: This section contains many errors and

misconceptions. First, the solar ponds are not permitable units because they do not meet the minimum permit requirements for surface impoundments. Therefore, they must close. The IAG set up a compliance schedule for closure of the ponds, predicated on the sludge being previously removed from the ponds per DOE commitments made in the Agreement in Principle (AIP). As we are all aware, DOE did not meet these commitments and sludge is still in some of the ponds. In turn, DOE is now unable to comply with the IAG because characterization of the ponds in support of a closure remedy could not occur.

Second, cost estimates associated with the pond-liner storage option do not substantiate that pond storage would have been cheaper than tank storage. In addition, implementation time would have been much longer for a relined pond than for tank storage.

Third, the text claims that O&M costs associated with tank storage are higher than costs would have been for re-lined pond storage. The reasons for this are unclear since management, inspections, and monitoring would occur for both options. It is interesting to note that DOE's former baseline of creating pondcrete from the sludge and the associated costs of storage and management are missing.

Fourth, to imply that containerization of the pond sludge is not a wise use of storage space is untenable. Had DOE performed under the AIP, the sludges would have been converted to pondcrete and the 750 Pad would already be full. In fact, DOE did not back off the pondcrete baseline until June, 1993, when the Division proposed containerization. In addition, the pond sludges contain hazardous waste that has been stored in the ponds without interim status or a permit for years. The Division stepped in and required containerization because the ponds have continued to leak, hazardous waste continues to be stored without a permit, incredible amounts of money have been wasted, and cost estimates have exponentially increased - all while DOE has been unsuccessfully looking for a solution.

Fifth, to suggest that a cap over the solar pond area would curtail any beneficial use of the area shows a misunderstanding of caps. Construction of parking lots or certain types of waste storage areas on a cap are both possible, to name only two possible uses. Regardless of the future use however, a cap will be required unless "clean closure" can be attained.

Sixth, future costs associated with removal of the sludges from the containers for treatment and disposal would have been incurred no matter where the sludges would have been stored. Attaching these costs to the containerization option is not sound analysis.

The mission of the plant is now environmental restoration and waste management. DOE has compliance problems on both fronts that need to be solved. Sacrificing compliant hazardous waste storage so

that ER waste can be placed conveniently is unacceptable. Conversely, sacrificing IAG milestones because insufficient waste storage is available is also unacceptable. These problems are not new and DOE has had plenty of time to address them. Non-compliance resulting from DOE's failure to plan will not be tolerated.

Section 4.5.3: The text in this section mentions that the current ER program includes plans to construct a ground water treatment facility. Please clarify where in the current ER program this is being done. The Division endorses an approach for a centralized ground and surface water treatment facility.

Section 4.7: The Division has experienced previous nonenforceable DOE agreements and their fallout (AIP - Solar Ponds). Therefore, we will not agree to a nonenforceable IAG. In fact, we believe that only through enforceable agreements will cleanup actually occur. There are many examples of necessary projects being delayed or cancelled because of a lack of enforceable drivers.

Section 4.7.1: It seems that the author of this section is not aware of the detailed schedules (August 14, 1990) prepared in support of the IAG milestones. These schedules already contain very consistent task durations.

No facility in Colorado is allowed a "floating" compliance schedule, including DOE. This is true for bankrupt facilities and solvent facilities, regardless of where DOE fits now or in the future.

Section 4.7.2: Exposure scenarios and RMEs are part of risk assessment. Site end use will be part of risk management. These items are not related as the text indicates unless DOE is trying to avoid cleanup by predefining limitations on land use, which we will not allow (predefining land use is not a DOE, EPA, or CDH decision - it is a decision that should be made by the public with a full understanding of the issue). The Division agrees that the IAG should further clarify a risk assessment **process**. However, we do not agree that the IAG "should establish realistic endstate possibilities for various portions of the site" and thereby predetermine remedial action decisions and cleanup levels. This should be a cooperative effort involving all stakeholders. Whatever the stakeholders decide, the IAG should be structured, as it currently is, to assess the risk of a site and implement a cleanup consistent with stakeholder desires.

The Division recognizes that unrestricted use is currently not plausible for all areas of the plantsite. See our comments to Section 3.3. However, this does not decrease DOE's responsibility and should not decrease DOE's desire to limit the areas of restricted use. Nor does it diminish our responsibility to implement a consistent corrective action program under the implementing regulations of the CHWA.

Section 4.7.5: Waste storage issues are not, and will not, be included in the IAG. These are activities that properly belong under the hazardous waste permit, and will remain there. Modification of the permit to address changing waste management and storage needs at the facility is DOE's responsibility. As we have previously stated in these comments, the Division stands ready to assist this effort and has already made this issue a top priority.